

REMARKS

A. Objection to Specification

In the Office Action mailed on October 4, 2004, the specification was objected to for stating that an output device can display a quotient acoustically. Applicants traverse the objection. According to Webster's Ninth New Collegiate Dictionary (see attached definition), the verb "display" means "to make evident." There is no limit in the definition as to how an object is made evident. Accordingly, the reference to an acoustic display of a quotient is acceptable. Accordingly, the objection is improper and should be withdrawn.

B. Objection to Claims

Claims 1-20 were objected to for several informalities. In particular, claim 1 was objected to for not using "a" in line 2 and using "said" in line 9 when referencing the mass moment of inertia. Claim 1 has been amended to use "a" and "said" in the manner suggested by the Office Action. Accordingly, the objection has been overcome and should be withdrawn.

Claim 1 was objected to because it was unclear whether "a motor speed" was the same as the speed referred to in the phrase "a constant speed of said motor." Claim 1 has been amended so that the phrase reads as "a constant motor speed of said motor." Since it is clear that the speeds mentioned in the phrases in question are one and the same, the objection has been overcome and should be withdrawn.

Claim 5 was objected to for including the phrase "to of." In view of the cancellation of the offending phrase, the objection has been overcome and should be withdrawn.

Claim 9 was objected to because claim 1 did not recite more than one defined acceleration. Applicants traverse the objection. Claim 1 is not limited to any number of

accelerations since it uses “comprising” language in the claim. Furthermore, claim 9 regards further defining the calculating process of claim 1, which does not mention operating the drive motor at any particular acceleration. Accordingly, the objection is improper and should be withdrawn.

Claim 14 was objected to because it was unclear whether the recited acceleration was the same as the recited “defined acceleration” of claim 1. Claim 14 has been amended so as to change “an acceleration” to read as “said defined acceleration.” Since the terms are consistent, the rejection has been overcome and should be withdrawn.

Claim 16 was objected to because it was unclear whether the recited “a total mass moment of inertia of said drive system” is the same as the calculated inertia of the electric drive system of claim 1. Applicants traverse this objection in that the claim is clear that they are different parameters since the calculated mass moment of inertia is based on determining a mass moment of a load from a difference between a total mass moment of inertia of the drive system and a mass moment of the drive motor.

Claim 19 was objected to because the claim did not further limit claim 18. As pointed out above in Section A, the verb “displaying” is not limited to a visual display of an item. Accordingly, the objection is improper and should be withdrawn.

Claim 20 was objected to because “displaying” could not, by definition be an audio display as recited in the claim. As pointed out above in Section A, the verb “displaying” is not limited to a visual display of an item. Accordingly, the objection is improper and should be withdrawn.

Please note that the amendments of claim 1 regarding the use of “a” and “said” are being

done merely to clarify the invention. The addition of “motor” and the amended language “said motor speed” are being presented solely to clarify the invention. Since the amendments do not change the intended meaning or scope of claim 1, the amendments are not related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722, 122 (2002). (hereinafter *Festo I*).

The addition of “motor” in claims 2 and 3 is being presented solely to clarify the invention. Since the amendments do not change the intended meaning or scope of claims 2 and 3, the amendments are not related to patentability as defined in *Festo I*.

Regarding claim 5, it has been amended to incorporate elements recited in original claims 1 and 2. Since those amendments contain subject matter inherently present in claim 5, the amendments are not being presented for reasons of patentability. See, *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 535 U.S. 722, 122 (2002). (hereinafter *Festo II*). Claim 5 has also been amended to delete the phrase “to of.” Since this deletion corrects an obvious typographical error it is not being presented for reasons of patentability as defined in *Festo I*.

Regarding claim 14, it has been amended to incorporate elements recited in original claim 1. Since those amendments contain subject matter inherently present in claim 14, the amendments are not being presented for reasons of patentability. See, *Festo II*.

Claim 15 has also been amended to replace “comprise” with “comprises.” Since this amendment corrects an obvious typographical error it is not being presented for reasons of patentability as defined in *Festo I*.

Claim 16 has added the phrase “of said mass moment of inertia” solely to clarify the invention in view of the amendment of claim 1. Since the amendment does not change the intended scope or meaning of claim 16, the amendment is not related to patentability as defined in *Festo I*.

Regarding claim 17, it has been amended to incorporate elements recited in original claim 1. Since those amendments contain subject matter inherently present in claim 17, the amendments are not being presented for reasons of patentability. See, *Festo II*.

C. 35 U.S.C. §112, First Paragraph

Claim 8 was rejected under 35 U.S.C. § 112, first paragraph, for failing the written description requirement. In particular, the rejection asserts that the specification does not disclose the current being output from a revolution speed controller. Applicants traverse the rejection in that claim 8 does not recite the determined compensation current is output from a revolution speed controller. Instead, the claim recites that the “compensation current is formed by the use of a feedforward current of a revolution speed controller.” Support for claim 8 can be found in paragraph 0014 of the Applicants’ Specification.

D. 35 U.S.C. §102

Claims 1-3, 9 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Fujii et al. Independent claim 1 has been amended to clarify that a torque constant of the drive motor is calculated and used in conjunction with the determined acceleration current to calculate the mass moment of inertia of the electric motor drive system. Fujii et al. does not disclose either calculating a torque constant of a drive motor or using a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive

system. Accordingly, the rejection is overcome and should be withdrawn.

Besides not being anticipated by Fujii et al., claim 1 is not rendered obvious by Fujii et al. since there is no motivation in Fujii et al. or the prior art to alter Fujii et al. to either calculate a torque constant of a drive motor or use a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system. Accordingly, claim 1 and its dependent claims 2, 3, 9 and 10 should be deemed patentable over Fujii et al.

E. 35 U.S.C. §103

1. Fujii et al. and Rehm et al.

Claim 16 was rejected under 35 U.S.C. § 103 as being obvious in view of Fujii et al. and Rehm et al. Claim 16 depends directly on claim 1. As mentioned above in Section D, Fujii et al. fails to disclose or suggest calculating a torque constant of a drive motor or using a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system. Rehm et al. does not cure the deficiencies of Fujii et al. in that it also does not suggest altering Fujii et al. to either calculate a torque constant of a drive motor or use a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system. Without such suggestion, the rejection has been overcome and should be withdrawn.

2. Didier et al. and Rehm et al.

Claims 1-4 were rejected under 35 U.S.C. § 103 as being obvious in view of Didier et al. and Rehm et al. Didier et al. fails to disclose calculating a torque constant of a drive motor or using a torque constant in conjunction with a determined acceleration current to calculate a mass

moment of inertia of an electric motor drive system in the manner as recited in claim 1. Rehm et al. does not cure the deficiencies of Didier et al. in that it does not suggest altering Didier et al. to either calculate a torque constant of a drive motor or use a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system. Without such suggestion, the rejection has been overcome and should be withdrawn.

3. Igarashi et al. and Rehm et al.

Claims 1, 2, 7 and 13 were rejected under 35 U.S.C. § 103 as being obvious in view of Igarashi et al. and Rehm et al. Igarashi et al. fails to disclose calculating a torque constant of a drive motor or using a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system in the manner as recited in claim 1. Rehm et al. does not cure the deficiencies of Igarashi et al. in that it does not suggest altering Igarashi et al. to either calculate a torque constant of a drive motor or use a torque constant in conjunction with a determined acceleration current to calculate a mass moment of inertia of an electric motor drive system. Without such suggestion, the rejection has been overcome and should be withdrawn.

F. Claims 5, 6, 11, 12, 14, 15 and 17-20

Applicants note with appreciation that claims 5, 6, 11, 12, 14, 15 and 17-20 have been indicated to contain allowable subject matter. It is also noted that a statement of reasons of allowance for claims 5, 11, 12, 14 and 17 has been given. Applicants traverse the statement to the extent that there are broader and other reasons why the claims are allowable.

Please note that claims 5, 14 and 17 have been amended so as to be in independent form and so should be allowed.

G. New Claims 21-28

New claims 21-28 depend directly or indirectly from claim 1 and so are patentable for at least the same reasons that claim 1 is patentable as mentioned above in Sections D and E. Note that claims 21-28 correspond to original claims 5, 6, 14, 15 and 17-20, respectively, and include various amendments to the text of the original claims made in the present amendment excluding the incorporation of the text of dependent claims.

Please note that new claims 21-28 are being presented to provide additional coverage for the method of claim 1. Accordingly, the new claims are not being presented for reasons of patentability as defined in *Festo I*.

H. New Claims 29-34

New claims 29-34 are being presented to provide additional coverage for a method for determining a control parameter of an electric drive system. Accordingly, the new claims are not being presented for reasons of patentability as defined in *Festo I*.

CONCLUSION

In view of the arguments above, Applicants respectfully submit that all of the pending claims 1-34 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes

that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorney at (312) 321-4200.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John C. Freeman", is written over a horizontal line.

John C. Freeman
Registration No. 34,483
Attorney for Applicants

BRINKS HOFER
GILSON & LIONE
P.O. Box 10395
Chicago, Illinois 60610
(312) 321-4200

Dated: February 4, 2005